## COPY OF ALL CLAIMS

- 1. A mixture comprising
- A) at least one copolymer obtained by
  - (i) free-radically initiated solution polymerization of a monomer mixture of
    - (a) 0.01 to 99.99% by weight of at least one monomer chosen from the group consisting of N-vinylimidazoles and diallylamines, optionally in partially or completely quaternized form;
    - (b) 0.01 to 99.99% by weight of at least one neutral or basic water-soluble monomer which is different from (a);
    - (c) 0 to 50% by weight of at least one unsaturated acid or an unsaturated anhydride;
    - (d) 0 to 50% by weight of at least one free-radically copolymerizable monomer which is different from (a), (b) and (c); and
    - (e) 0 to 10% by weight of at least one monomer having at least two ethylenically unsaturated nonconjugated double bonds which acts as crosslinker, and
  - (ii) subsequent partial or complete quaternization or protonation of the polymer where the monomer (a) is not quaternized or only partially quaternized

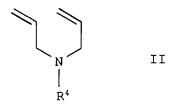
and

- B) at least one inorganic UV filter.
- 2. A mixture as claimed in claim 1, wherein the copolymer A) is obtained by solution polymerization in water.
- 3. A mixture as claimed in claim 1, wherein the monomer (e) used is 0.01 to 10% by weight of at least one monomer having at least two ethylenically unsaturated nonconjugated double bonds which acts as crosslinker.
- 4. A mixture as claimed in claim 1, wherein the protonation according to (ii) takes place during the preparation of the mixture.
- 5. A mixture as claimed in claim 1, wherein the monomer (a) used is at least one N-vinylimidazole derivative of the formula (I)

$$R^3$$
 $N$ 
 $R^1$ 
 $R^2$ 

in which the radicals  $R^1$  to  $R^3$ , independently of one another, are hydrogen,  $C_1$ - $C_4$ -alkyl or phenyl.

6. A mixture as claimed in claim 1, wherein the monomer (a) used is at least one diallylamine derivative of the formula (II)



in which the radical  $R^4$  is  $C_1$ - $C_{24}$ -alkyl.

- 7. A mixture as claimed in claim 1, wherein the monomer (b) used is at least one N-vinyllactam.
- 8. A mixture as claimed in claim 1, comprising, as inorganic UV filter B), at least one micronized metal oxide chosen from the group consisting of titanium dioxide, zinc oxide, cerium oxide, aluminum oxide, silicon oxide, zirconium oxide, manganese oxide, aluminum oxide and iron oxide.
- 9. A mixture as claimed in claim 8, comprising, as inorganic UV filter B), at least one hydrophobicized metal oxide chosen from the group consisting of titanium dioxide and zinc oxide.

10. A mixture as claimed in claim 9, in which the metal oxide has been coated with a silicone of the formula III

in which, independently of one another,  $R^5$  is  $C_1$ - $C_{12}$ -alkyl and  $R^6$  is methyl or ethyl, and a is a value from 4 to 12.

- 11. A mixture as claimed in claim 1, wherein the proportion of inorganic UV filters is 0.1 to 99.9% by weight.
- 12. A mixture as claimed in claim 1, comprising at least one further organic UVA and/or UVB filter.
- 13. A process for the preparation of cosmetic and dermatological preparations wherein a mixture defined as in claim 1 is prepared, optionally mixed with other compounds and applied to the human skin or the human hair.
- 14. The process as claimed in claim 13 for producing cosmetic and dermatological

HOESSEL et al., Serial No. 09/771,595

preparations for protecting the human skin or human hair against solar rays, wherein the mixture is prepared, optionally mixed with compounds which absorb in the UV region and which are known per se for cosmetic and pharmaceutical preparations, and is then applied to the human skin or human hair.

- 15. A cosmetic or dermatological sunscreen preparation for protecting the human skin or human hair against solar rays, comprising a mixture defined as in claim 1.
- 16. A mixture comprising
- A) at least one copolymer obtained by
  - (i) free-radically initiated solution polymerization of a monomer mixture of
    - (a) 10 to 70% by weight of 3-methyl-1-vinylimidazolium methosulfate,
    - (b) 20 to 89.95% by weight of N-vinylpyrrolidone,
    - (c) 0.05 to 5% by weight of N,N'-divinylethylenurea, and
  - (ii) subsequent partial or complete quaternization or protonation of the polymer where the monomer (a) is not quaternized or only partially quaternized

and

B) 30 to 90% by weight, based on the solids content of the mixture, of at least one hydrophobicized metal oxide chosen from the group consisting of titanium

HOESSEL et al., Serial No. 09/771,595

dioxide and zinc oxide.